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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Einar Paul Edvardsen

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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT

PAPER NUMBER

2476

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,701	Applicant(s) EDVARSEN ET AL.	
	Examiner Andrew C. Lee	Art Unit 2476	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1 – 17 have been canceled.
2. Claims 18 – 43 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18, 19, 30, 36, 20, 21, 22, 27, 28, 29, 35, 41, 42, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US 7010002 B2) in view of Mo et al. (US 20030072264 A1).

Regarding claim 18, Chow et al. disclose a method of providing mobile or nomadic broadband services (*wireless access system/service, using a local broadband network, Abstract, Fig. 1., Fig. 2, Fig. 6, col. 15, lines 58 – 65*), comprising: providing access to a fixed broadband network to roaming mobile terminals (*element 118, TIA/EIA-136, IEEE 802.11, EDGE/GPRS*) via the wireless Local Area Network LAN, said wireless LAN being connected to a broadband access line (*Broadband transport link, coaxial xDSL, Fig. 1*) of the fixed broadband network, the broadband access line having a first capacity subscribed for by a fixed subscriber (*"Home 'Enterprise Wireless Communication Platform' EWCSP" as wireless local area network, "broadband*

Art Unit: 2476

transport network” as a fixed broadband network, and elements TIA/EIA-136 IEEE 802.11 EDGE/GPRS as roaming mobile terminals, and broadband transport link as a first capacity subscribed for by a fixed subscriber; Fig. 1, col. 2, lines 29 – 62; roaming, wireless station; Fig. 6, col. 15, lines 58 – 67, col. 16, lines 1 – 12), Chow et al. also disclose a resource management system (“Network Server Platform (NSP”; Fig. 1, Fig. 2, col. 8, lines 57 – 67, col. 9, lines 1 – 2) except access line further having a second capacity not subscribed for, allocating, using a resource management system, at least a portion of the second capacity to the nodes.

Mo et al. in the same field of endeavor teach access line further having a second capacity not subscribed for, allocating at least a portion of the second capacity to the nodes (*“unreserved portion.....” is interpreted as having a second capacity not subscribed and “bandwidth allocated may be set aside...” interpreted as at least a portion of the second capacity to the nodes; Abstract, paras. [0003], [0017], [0018]).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of having a second capacity not subscribed for, allocating at least a portion of the second capacity to the nodes as taught by Mo et al. One of ordinary skill in the art would be motivated to do so for providing system and method for providing resizing of the bandwidth of a physical link based upon the utilization of the link is desirable (*as suggested by Mo et al., see para. [0004]).*

Regarding claims 19, 30, 36, Chow et al. disclose wherein said first capacity is bandwidth (*at least on 6MHz downstream, col. 8, lines 37 - 49*), Chow et al. do not disclose explicitly wherein said first and second capacities are bandwidth.

Mo et al. in the same field of endeavor teach wherein said first and second capacities are bandwidth (*"bandwidth allocated...."; Abstract, paras. [0003], [0017], [0018]*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of wherein said first and second capacities are bandwidth as taught by Mo et al. One of ordinary skill in the art would be motivated to do so for providing One of ordinary skill in the art would be motivated to do so for providing system and method for providing resizing of the bandwidth of a physical link based upon the utilization of the link is desirable (*as suggested by Mo et al., see para. [0004]*).

Regarding claim 20, Chow et al. disclose wherein said wireless LAN has a coverage zone at subscriber premises of said fixed broadband *network ("Home 'Enterprise Wireless Communication Platform' EWCSF" and target boundaries as wireless LAN has a coverage zone at subscriber premises; Fig. 1, col. 2, lines 29 – 62, col. 10, lines 23 – 33)*.

Regarding claim 21, Chow et al. disclose wherein said wireless LAN is installed at said subscriber premises (*"home"; Fig. 1, col. 2, lines 29 – 62, col. 10, lines 23 – 55*).

Regarding claim 22, Chow et al. disclose the method claimed wherein said roaming mobile terminals are casually passing through said coverage zone (*"the*

Art Unit: 2476

subscriber may use the same wireless phone at home, on the road, and in the office” interpreted as said roaming mobile terminals are casually passing through said coverage zone; Fig. 1, col. 2, lines 29 – 62, col. 10, lines 23 – 55).

Regarding claim 27, Chow et al. disclose the method claimed further comprising performing security and authentication functions securing terminals of said fixed subscriber and said roaming mobile terminals against tapping and illegal use of said fixed broadband network (*“security measureinvoke an authentication procedure” interpreted as performing security and authentication functions securing terminals; Fig. 6, col. 16, lines 8 – 22).*

Regarding claim 28, Chow et al. disclose the method claimed further comprising providing protocols in said fixed broadband network for performing mobility, handover and roaming procedures (*“TIA/EIA-136, EDGE/GPRS, IEEE 802.11b” interpreted as providing protocols in said fixed broadband network for performing mobility, handover and roaming procedures; Fig. 1, col. 10, lines 23 – 47, col. 12, lines 18 – 54).*

Regarding claim 29, Chow et al. disclose a digital, mobile broadband network providing mobile or nomadic broadband services (*wireless access system/service, using a local broadband network, Abstract, Fig. 1., Fig. 2, Fig. 6, col. 15, lines 58 – 65; Fig. 7, Fig. 9, col. 21, lines 13 – 46*), the digital mobile broadband network comprising: a fixed broadband network (*broadband transport network; col. 2, lines 42 – 55*); at least one wireless local area network (LAN) connected via a broadband access line to the fixed broadband network, the broadband access line having a first capacity subscribed for by fixed subscribers (*“Home ‘Enterprise Wireless Communication Platform’ EWCSF”*

as wireless local area network, "broadband transport network" as a fixed broadband network, and elements TIA/EIA-136 IEEE 802.11 EDGE/GPRS as roaming mobile terminals, and broadband transport link as a first capacity subscribed for by a fixed subscriber; Fig. 1, col. 2, lines 29 – 62), except the broadband access line further having a second capacity not subscribed for, wherein at least a portion of the unsubscribed capacity is allocated to roaming mobile terminals.

Mo et al. in the same field of endeavor teach access line further having a second capacity not subscribed for, wherein at least a portion of the unsubscribed capacity is allocated to the nodes (*"unreserved portion....." is interpreted as having a second capacity not subscribed and "bandwidth allocated may be set aside..." interpreted as at least a portion of the second capacity to the nodes; Abstract, paras. [0003], [0017], [0018]*). At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of access line further having a second capacity not subscribed for, wherein at least a portion of the unsubscribed capacity is allocated to the nodes as taught by Mo et al. One of ordinary skill in the art would be motivated to do so for providing system and method for providing resizing of the bandwidth of a physical link based upon the utilization of the link is desirable (*as suggested by Mo et al., see para. [0004]*).

Regarding claim 35, Chow et al. disclose a home network device providing mobile or nomadic broadband services in an existing fixed, broadband network comprising a number of subscribers (*element 104 MTA interpreted as home network device; Fig. 1, col. 2, lines 43 – 66, col. 6, lines 33 – 57*), said home network device

Art Unit: 2476

comprising: a wireless Local Area Network (LAN) providing local, wireless broadband communication for terminals of a subscriber of the fixed, broadband network and wireless broadband communication for roaming mobile terminals (*"Home 'Enterprise Wireless Communication Platform' EWCSP" as wireless local area network, "broadband transport network" as a fixed broadband network, and elements TIA/EIA-136 IEEE 802.11 EDGE/GPRS as roaming mobile terminals; Fig. 1, col. 2, lines 29 – 62, col. 6, lines 33 – 57*); a broadband access line connected to the fixed broadband network (*"broadband transport link" interpreted as broadband access line, and "broadband transport network" interpreted as fixed broadband network, Fig. 1, col. 6, lines 14 – 57*), the broadband access line having a first capacity subscribed for by the subscriber (*6 MHz downstream, col. 8, lines 37 – 49*) and except a second capacity not subscribed for; Chow et al. also disclose a resource management system (*"system controller, the network server Platform (NSP)" interpreted as a resource management system*) except for allocating at least a portion of the second capacity to the roaming mobile terminals.

Mo et al. in the same field of endeavor teach a second capacity not subscribed for; allocating at least a portion of the second capacity to the nodes (*"unreserved portion....." is interpreted as having a second capacity not subscribed and "bandwidth allocated may be set aside..." interpreted as at least a portion of the second capacity to the nodes; Abstract, paras. [0003], [0017], [0018]*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of a second capacity not subscribed for; allocating at least a portion of the second capacity

Art Unit: 2476

to the nodes as taught by Mo et al. One of ordinary skill in the art would be motivated to do so for providing system and method for providing resizing of the bandwidth of a physical link based upon the utilization of the link is desirable (*as suggested by Mo et al., see para. [0004]*).

Regarding claim 41, Chow et al. disclose protocol means providing seamless mobility and handover procedures for maintaining a connection to said fixed broadband network for a mobile terminal passing through said wireless LAN (*"TIA/EIA-136, EDGE/GPRS, IEEE 802.11b" interpreted as providing protocols in said fixed broadband network for performing mobility, handover and roaming procedures; Fig. 1, col. 10, lines 23 – 47, col. 12, lines 18 – 54*).

Regarding claim 42, Chow et al. disclose the home network device claimed comprising protocol means providing roaming between different fixed network operators, peer-to-peer/Ad Hoc operators and said wireless LAN (*"TIA/EIA-136, EDGE/GPRS, IEEE 802.11b" interpreted as protocol means providing roaming between different fixed network operators, peer-to-peer/Ad Hoc operators and said wireless LAN; Fig. 1, col. 5, lines 13 - 33, col. 10, lines 23 – 47, col. 12, lines 18 – 54*).

Regarding claim 43, Chow et al. disclose function means supporting the fixed broadband network's management and charging requirements (*"Operation, Administration and Maintenance"... "...is billed"; col. 8, lines 57 – 67, col. 10, lines 36 – 42*).

Art Unit: 2476

5. Claims 23, 31, 37, 24, 32, 38, 25, 33, 39, 26, 34, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US 7010002 B2) and Mo et al. (US 20030072264 A1) as applied to claim 18 above, and further in view of Hagen (US 20020075844 A1).

Regarding claims 23, 31, 37, Mo et al. disclose allocating a portion of said first capacity to nodes (*para. [0020]*); however, Chow et al. and Mo et al. do not disclose explicitly further comprising allocating a portion of said first capacity to said roaming network terminals.

Hagen in the same field of endeavor teaches allocating a portion of said first capacity to said roaming network terminals (*“allocates a portion of the NAS’s available uplink bandwidth”*; *Fig. 17, Fig. 19, para. [0104]*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. and Mo et al. to include the features of allocating a portion of said first capacity to said roaming network terminals as taught by Hagen. One of ordinary skill in the art would be motivated to do so for effectively integrating diverse private and public networks to provide ubiquitous, network access at broadband data rates using existing infrastructure (*as suggested by Hagen, see paragraph [0010]*).

Regarding claims 24, 32, 38, Mo et al. implicitly disclose said portion of said first capacity is an unused portion of said first capacity (*para. [0020], [0022]*); however, Chow et al. and Mo et al. do not disclose explicitly wherein said portion of said first

capacity is an unused portion of said first capacity (*“available uplink bandwidth” interpreted as an unused portion of said first capacity; Fig. 17, Fig. 19, para. [0104]*).

Hagen in the same field of endeavor teaches wherein said portion of said first capacity is an unused portion of said first capacity (*“allocates a portion of the NAS’s available uplink bandwidth”; Fig. 17, Fig. 19, para. [0104]*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. and Mo et al. to include the features of wherein said portion of said first capacity is an unused portion of said first capacity as taught by Hagen. One of ordinary skill in the art would be motivated to do so for effectively integrating diverse private and public networks to provide ubiquitous, network access at broadband data rates using existing infrastructure (*as suggested by Hagen, see paragraph [0010]*).

Regarding claims 25, 33, 39, Chow et al. and Mo et al. do not disclose explicitly wherein said portion of said first capacity is released to said roaming mobile terminals through priority mechanisms giving priority to roaming mobile terminals over terminals of said fixed subscriber.

Hagen in the same field of endeavor teaches wherein said portion of said first capacity is released to said roaming mobile terminals through priority mechanisms giving priority to roaming mobile terminals over terminals of said fixed subscriber (*paras. [0104], [0109], [0110]*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. and Mo et al. to include the

Art Unit: 2476

features of wherein said portion of said first capacity is released to said roaming mobile terminals through priority mechanisms giving priority to roaming mobile terminals over terminals of said fixed subscriber as taught by Hagen. One of ordinary skill in the art would be motivated to do so for effectively integrating diverse private and public networks to provide ubiquitous, network access at broadband data rates using existing infrastructure (*as suggested by Hagen, see paragraph [0010]*).

Regarding claims 26, 34, 40, Chow et al. disclose wherein said terminals of said fixed subscriber are wireless terminals (*Fig. 1, col. 2, lines 29 – 62*).

Response to Arguments

6. Applicant's arguments filed on 4/20/2010 with respect to claims 18 – 43 have been fully considered but they are not persuasive.

Claim rejections under 35 USC 103

Regarding claim 18, applicants merely remark “However, Applicants note that Chow does not, in fact, teach a first capacity subscribed for by a fixed subscriber. Chows mentions the word "capacity" only once (pointing out that wireless communication often has limited radio capacity in densely populated areas) and the word "bandwidth" only once (in the background section where it refers to the bandwidth limits of POTS). There is no allocation of capacity disclosed in Chow whatsoever. Indeed, from a bandwidth point of view, the roaming wireless laptops and non-roaming devices are treated the same in Chow. Thus, there is no way of differentiating between bandwidth allocation to the two types of devices in Chow because 1) the NSP has no way of controlling allocation of bandwidth at all and 2) roaming and non-roaming devices are treated the same by all other network components. (See, e.g., Chow at col. 15, line 55 to col. 16, line 26). Mo describes how the capacity of a communication medium can be divided among several channels. In the system disclosed in Mo, the several channels are associated with different qualities of service (QoS). For example, the reserved bandwidth can be allocated to a reserved channel of one priority class ("[0017]... For example, a reserved channel class may be defined and include a guaranteed bandwidth that is available on medium 200 at all times [0018] Medium 200 includes a portion 200A having a reservation bandwidth that is reserved and thus

Art Unit: 2476

unavailable for transmissions external to reserved channel 210"), while the remaining bandwidth can be allocated to other channels as needed ("[0018]...The remaining, unreserved portion 200B may be used for allocating other channels [0019] A best effort channel 220 may be allocated upon a request identified as a best effort request.") In other words, Mo describes how users may require different QoS for different uses such as streaming audio or video on the one hand and email or Internet content delivery on the other hand (see [0002] and [0003]). Mo distinguishes between services satisfying different customer needs, not different customers with different access rights. The present invention addresses the question of how to provide broadband capacity to roaming mobile terminals without the use of dedicated lines and base stations. Using Chow to solve this problem would entail opening up home access points of home users as if any roaming mobile terminal were a friend. Adding the teachings of Mo would enable prioritization of capacity assigned to different types of services accessed/used by home user and roaming users alike. However, Chow and Mo alone or combined do not disclose how network capacity can be assigned respectively to a fixed subscriber and roaming terminals as required by amended claim 18. Accordingly, claim 18 is believed to be patentable over the combination of Chow and Mo.

Remaining independent claims 29 and 35 recite features corresponding to independent claim 18, and should be allowable for at least the same reasons stated for claim 18. Dependent claims 19-22, 27, 28, 30, 36 and 41-43 should be allowable at least by virtue of their dependence on corresponding independent claims 18, 29 and 35.

In response to Applicant's remark/argument, Examiner respectfully disagrees.

Applicants are reminded that, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is reminded that one with ordinary skill in the art is to give claims their broadest reasonable interpretation in the of the supporting disclosure. In *re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

The applicants' disclosure in the claim is merely bandwidth allocations or assignments for customers, with regard to whether the service is fixed or roaming. The bandwidth allocations are mainly assigned in the broadband access lines which are managed, administrated and maintained by the service providers (as resource management system).

Examiner contends the combined system of Chow et al. and Mo et al. teaches the broadband access line having a first capacity subscribed for by a fixed subscriber and access line further having a second capacity not subscribed for, allocating at least a portion of the second capacity to the nodes. Examiner interpreted the broadband access line having a first capacity subscribed for by a fixed subscriber as “Home ‘Enterprise Wireless Communication Platform’ EWCSP” as wireless local area network, “broadband transport network” and broadband transport link as a first capacity subscribed for by a fixed subscriber; See Chow et al. Fig. 1, col. 2, lines 29 – 62; roaming, wireless station; Fig. 6, col. 15, lines 58 – 67, col. 16, lines 1 – 12. While reference Mo et al. remedy the deficiencies of Chow et al. by disclosing the limitations of access line further having a second capacity not subscribed for, allocating at least a portion of the second capacity to the nodes. Mo et al. teach the physical link (which is equivalent to Broadband access line of the applicants’ claim subject matter) and bandwidth based on utilization (which is interpreted as bandwidth allocations for first and second capacities for end users, with regard to whether the services or bandwidths are for fixed or roaming service). Hence examiner interpreted access line further having a second capacity not subscribed for, allocating at least a portion of the second capacity to the nodes as “unreserved portion..... and “bandwidth allocated may be set aside...” see Mo et al. Abstract, paras. [0003], [0017], [0018].

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2476

- a) Siren (US 6763236 B2).
- b) Foore et al. (US 6542481 B2).
- c) Struhsaker (US 20080259826 A1).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 2476

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2476 <3Q10::6_15_10>

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art
Unit 2476